

Comparisons of Job Characteristics

Focus Occupation: Stationary Engineers and Boiler Operators (51-8021)

Associated Occupation: Boilermakers (47-2011)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 84

Focus Occupation: Stationary Engineers and Boiler Operators (51-8021)

Associated Occupation: Boilermakers (47-2011)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mechanical	6.8	17.5	18.6	0	Current knowledge level may be sufficient
Building and Construction	4.0	13.8	9.2	<<	Extensive education and/or training may be required
Engineering and Technology	5.7	12.6	10.4	<	Expanded education and/or training may be required
Design	5.2	11.9	8.9	<<	Extensive education and/or training may be required
Physics	4.3	7.6	9.6	>	Current knowledge level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 90

Focus Occupation: Stationary Engineers and Boiler Operators (51-8021)

Associated Occupation: Boilermakers (47-2011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Operation and Control	5.4	11.4	9.6	<	A higher skill level may be required
Operation Monitoring	6.6	11.1	10.7	0	Current skill level may be sufficient
Quality Control Analysis	5.9	10.6	8.4	<	A higher skill level may be required
Troubleshooting	4.5	9.6	9.2	0	Current skill level may be sufficient
Equipment Maintenance	3.5	9.3	8.5	0	Current skill level may be sufficient
Repairing	3.4	9.2	8.5	0	Current skill level may be sufficient
Equipment Selection	3.3	8.0	6.5	<	A higher skill level may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 86			
Focus Occupation: Stationary Engineers and Boiler Operators (51-8021) Associated Occupation: Boilermakers (47-2011)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Arm-Hand Steadiness	6.8	11.8	9.1	<<	Extensive improvement in abilities may be required
Control Precision	6.6	11.5	10.0	<	Some improvement in abilities may be required
Manual Dexterity	6.5	10.4	9.1	<	Some improvement in abilities may be required
Multilimb Coordination	6.0	10.3	10.2	0	Current ability level may be sufficient
Reaction Time	4.8	8.9	8.3	0	Current ability level may be sufficient
Extent Flexibility	4.8	8.7	6.4	<<	Extensive improvement in abilities may be required
Response Orientation	4.0	7.7	5.8	<<	Extensive improvement in abilities may be required
Gross Body Equilibrium	3.2	6.6	5.1	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 89
Focus Occupation: Stationary Engineers and Boiler Operators (51-8021) Associated Occupation: Boilermakers (47-2011)		
Work Activities	Exclusivity of Activity	
Inspect machinery or equipment to determine adjustments or repairs needed	42	
Install generating plant equipment	95	
Maintain or repair industrial or related equipment/machinery	39	
Overhaul power-generating equipment or machinery	89	
Use acetylene welding/cutting torch	54	
Use hand or power tools	2	
Use pneumatic tools	66	
Weld together metal parts, components, or structures	54	

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 78

Focus Occupation: Stationary Engineers and Boiler Operators (51-8021)
Associated Occupation: Boilermakers (47-2011)

Tools and Technologies	Exclusivity
Computers	1
Content authoring and editing software	1
Cutting tools	18
Dispensing tools	6
Forming tools	2
Gas analyzers and monitors	10
Hearing protectors	12
Holding and clamping tools	3
Indicating and recording instruments	2
Industry specific software	1
Ladders and scaffolding	6
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Light and wave generating and measuring equipment	4
Machine tools	7
Measuring and layout tools	3
Personal communication devices	2
Pneumatic tools	8
Power tools	2
Pressure measuring and control instruments	10
Respiratory protection	6
Safety apparel	4
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Vision protection and accessories	3
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.